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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,558	08/21/2006	Christian Hamon	020600-303	1877

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BUCHANAN, INGERSOLL & ROONEY PC  
POST OFFICE BOX 1404  
ALEXANDRIA, VA 22313-1404

EXAMINER
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BASS, DIRK R

ART UNIT	PAPER NUMBER
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1777

NOTIFICATION DATE	DELIVERY MODE
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08/16/2011

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com  
offserv@bipc.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,558	<b>Applicant(s)</b> HAMON ET AL.	
	<b>Examiner</b> DIRK BASS	<b>Art Unit</b> 1777	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 24,25 and 30-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 24-25, 30-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/8/11</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

Applicant's response filed June 17, 2011 is acknowledged. Claims 24, 30, and 35-39 are amended and claims 38-39 are withdrawn from consideration. Claims 24-25, and 30-37 are pending and further considered on the merits.

#### ***Response to Amendment***

In light of the amendments, the examiner modifies the grounds of rejection set forth in the office action dated February 17, 2011

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 24-25 and 30-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Pappin et al., USPA 2004/0219685 (Pappin, IDS) in view of Lomas, USPA 2003/0077616 (Lomas).

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4. Regarding claims 24-25 and 30-32, Pappin discloses a mass tag reagent (abstract) having the formula RP-L-RG, where RP is a reporter molecule such as piperidine (§ 0044), L is a linker moiety such as a carbonyl group (§ 0049), and RG is a reactive group such as hydroxysuccinimide ester (§ 0035).

5. Pappin fails to explicitly disclose the linker moiety being an alkylene group. However, Lomas discloses affinity tags (abstract) comprising the basic formula A-L-R (§ 0158), where A is an affinity label, L is a linker moiety such as an alkylene group (§ 0185), and R is a biomolecule reactive group.

6. At the time of invention it would have been obvious to modify the mass tag reagent of Pappin to have the alkylene group linker moiety of Lomas in order to provide a linking group which facilitates the reaction of the reactive group to a functional group and/or the binding of a capture reagent to the affinity label (Lomas, § 0185).

7. Furthermore, Pappin discloses various examples of mass tag reagents where the linking group is an alkylene group (fig. 1B, 8, 9A-B, 10, 11). Therefore, it can be envisaged that the mass tags of Pappin can include alkylene linker groups between a piperidine reporter moiety and a hydroxysuccinimidyl ester reactive group, since it has been shown that such linking groups are effective in linking reporter moieties and reactive groups together.

8. Regarding claims 33-35, Pappin (in view of Lomas) discloses a mass tag reagent further comprising a modified isotope distribution wherein the isotopes are hydrogen, carbon, and nitrogen (§ 0027, 0042, 0045).

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9. Regarding claim 36, Pappin (in view of Lomas) discloses an array of mass tag reagents which comprises two or more mass tags as described in claim 24 (abstract, ¶ 0016, 0052, 0054).

10. Regarding claim 37, Pappin (in view of Lomas) discloses an array of mass tag reagents such that each mass tag in the array has a different mass (¶ 0023, 0057, 0087).

### ***Response to Arguments***

11. Applicant's arguments with respect to claims 24-25 and 30-37 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIRK BASS whose telephone number is (571)270-7370. The examiner can normally be reached on Mon - Fri (9am-4pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vickie Kim can be reached on (571) 272-0579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DRB/

Dirk R. Bass

/Vickie Kim/

Supervisory Patent Examiner, Art Unit 1777